



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,332	06/21/2002	Kuninori Shino	SONY JP-160	1337

7590 11/15/2005

Lerner David Littenberg  
Krumholz & Mentlik  
600 South Avenue West  
Westfield, NJ 07090

EXAMINER
----------

LEUNG, WAI LUN

ART UNIT	PAPER NUMBER
----------	--------------

2633

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/019,332	<b>Applicant(s)</b> SHINO ET AL.	
	<b>Examiner</b> Danny Wai Lun Leung	<b>Art Unit</b> 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of US Patent Number 5,400,162 to Newberg et al.

Regarding to claim 7, Admission discloses a conventional optical communication apparatus (fig 3) in which light for transmission (output of 2, fig 3) and light for receipt (input of 13, fig 3) of substantially a same wavelength are propagated simultaneously over a single core fiber (21, fig 3) to effect bidirectional communication (specification page 3, ln 19- page 4, ln 7), comprising: light emitting means (2, fig 3) for emitting said light for transmission; light receipt means (13, fig 3) for receiving said light for receipt; light guide means (21, fig 3) for guiding said light for transmission over said fiber and for guiding said light for receipt to said light receipt means. The admission does not disclose expressly having controlling means in this conventional embodiment. Newberg, from the same field of endeavor, teaches an optical communication apparatus, comprising: controlling means (18) for controlling light emitting means (14a) and light receipt means (16a), said controlling means allowing for processing of a

Art Unit: 2633

signal corresponding to said light for receipt received by said light receipt means in a state in which said light for transmission is emitted by said light emitting means and propagated over said fiber (col 2, ln 51-63; the control signal activate a pair of respective switches, in which a detector switch enables a detector for processing a light signal at a state that a respective laser switch enables a laser for transmission over said fiber), said controlling means allowing for processing for transmission of a signal by said light for transmission emitted by said light emitting means in a state in which the light for receipt propagated over said fiber is being received by said light receipt means (col 2, ln 51-63; the control signal activate a pair of respective switches, in which a laser switch enables a laser for transmission over said fiber at a state that a respective detector switch enables a detector for processing a light signal). Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to implement Newberg's controlling schemes onto a conventional optical communication apparatus with light emitting means, light receipt means, and a single core fiber, effecting a bi-directional communication as described by the admitted prior art, such that processing of a signal corresponding to the receipt light received by said light receipt means is allowed in a state in which said light for transmission is emitted and propagated over said fiber, and processing for transmission of a signal by said light for transmission emitted by said light emitting means is allowed in a state in which the light for receipt propagated over said fiber is being received by said light receipt means. The motivation for doing so would have been to have more control over the optical signal being transmitted.

Regarding to claim 8, Admission discloses a conventional optical communication method for an optical communication apparatus comprising light emitting means for emitting light for transmission (2, fig 3), light receipt means for receiving light for receipt (13, fig 3) and light guide means (21, fig 3) for guiding light for transmission to a fiber and for guiding said light for receipt to said light receipt means, in which said light for transmission and said light for receipt of substantially a same wavelength are propagated simultaneously over a single core fiber to effect bidirectional communication (specification page 3, ln 19-page 4, ln 7); the admission does not disclose expressly allowing or not allowing processing of a signal at any particular state in this conventional method. Newberg, from the same field of endeavor, teaches an optical communication method comprising the steps of: allowing for processing of a signal corresponding to a light for receipt received by a light receipt means (16a) in a state in which a light for transmission is emitted by a light emitting means (14a) and propagated over a fiber (20-1) (col 2, ln 51-63; the control signal activate a pair of respective switches, in which a detector switch enables a detector for processing a light signal at a state that a respective laser switch enables a laser for transmission over said fiber); and allowing for processing for transmission of a signal by said light for transmission emitted by said light emitting means (14a) in a state in which the light for receipt propagated over said single core fiber is being received by said light receipt means (16a) (col 2, ln 51-63; the control signal activate a pair of respective switches, in which a laser switch enables a laser for transmission over said fiber at a state that a respective detector switch enables a detector for processing a light signal). Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to apply Newberg's controlling schemes onto a conventional light transmission method for an optical communication

Art Unit: 2633

apparatus comprising light emitting means for emitting light for transmission, light receipt means for receiving light for receipt and light guide means for guiding light for transmission to a fiber and for guiding said light for receipt to said light receipt means, in which said light for transmission and said light for receipt of substantially a same wavelength are propagated simultaneously over a single core fiber to effect bidirectional communication comprising as described by the admitted prior art. The motivation for doing so would have been to have more control over the optical signal being transmitted.

*Allowable Subject Matter*

4. Claims 1-6 are allowed.

*Response to Amendment*

5. Applicant's arguments with respect to claims 7 and 8 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2633

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Wai Lun Leung whose telephone number is (571)272-5504. The examiner can normally be reached on 9am-5pm Mon-Fri, except federal holidays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 9, 2005  
DWL

  
**JASON CHAN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**